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# FACSIMILE COVER SHEET

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Facsimile No.: (571) 273-8300	Date: <u>July 29, 2005</u>				
From: Steven Laur, Reg. No. 47,736					
Our Docket No.: 42390P11914	Number of pages <u>16</u> including this sheet.				
Application No.: <u>09/964,950</u>	Filing Date: 9/27/2001				
Enclosed are the following documents:	Docket Due Date(s): <u>6/29/2005</u> 7/29/2005				
Amendment: <u>Response</u> ( <u>13</u> pgs)	☐ Issue Fee Transmittal				
Appeal Brief ( pgs)	☐ Notice of Appeal				
Application:	Petition for:				
( pgs) w/cover & abstract)	Request for Continued Examination (RCE)				
☐ Assignment & Cover Sheet ( pgs)	Reply Brief ( pgs)				
☑ Certificate of <u>Facsimile</u>	☐ Request & Certification Under 35 USC 122(b)(2)(B)(i)				
☐ Continued Prosecution Application (CPA)	☐ Request to Rescind Previous Nonpublication Request				
☐ Declaration & POA ( pgs)	☐ Response to Notice of Missing Parts & Formalities Letter				
☐ Drawings: sheets, figures	Response to Written Opinion ( pgs)				
Extension of Time:one (1)_month	☐ Terminal Disclaimer				
☑ Fee Transmittal (in duplicate)	☐ Transmittal of Publication Fee Due				
☐ IDS & PTO/SB/08 ( pgs)	☐ Transmittal Letter				
Other					
CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8A)  1 hereby certify that this correspondence is being transmitted by facsimile on the date shown below to the United States  Patent and Trademark Office.  7/29/2005					

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Jean-Svoboda

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FEE TRANSMITTAL	Complete if Known						
	Application Number						
for FY 2005	Filing Date		er 27, 2001	·			
Patent fees are subject to annual revision.	First Named Inventor Examiner Name	De41 17 17+					
Applicant claims small entity status. See 37 CFR 1.27.	Art Unit	2195	Bullock, Ji	·			
TOTAL AMOUNT OF PAYMENT (\$) 120.00	Attorney Docket No.		914				
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METHOD OF PAYMENT (check all that apply)							
Check Credit card Money Order None Other (please identify):							
Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP							
For the above-identified deposit account, the Director is I	nereby authorized t	o: (check all that a	apply)				
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under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.		• • •					
FEE CALCULATION							
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SUBMITTED BY Name (Print/Type) Steven Laur	Registration No. (Attomey/Agent)	47,736	Telephone	(310) 207-3800			

#### IN THE CLAIMS

## Claims 1-9 (Canceled)

Claim 10 (Currently Amended): An apparatus comprising:

- a memory to host store a code segment, the code segment having a set of instances of a parallel construct, each of the set of instances of the parallel construct associated with a task; and
- a set of processors coupled to the memory, the set of processors to process the code segment, to encounter one of the set of instances instance while processing the code segment, to generate a second code segment corresponding to the one of the set of instances instance, the second code segment to comprising eause each of a team of a plurality of threads when executed to perform the following:
  - to determine if the task associated with the one of the set of instancesinstance has been undertaken by another one of the set of threadsthread by a first thread that when executed to compare a first private value of the first thread and a second private value of the first thread,
  - if the task has not been undertaken by the other another one of the set of threads thread, to undertake the task and to indicate with a shared value the undertaking of the task, and
  - to indicate with a-the first private value the one of the set of instancesinstance.

### Claim 11 (Canceled)

Claim 12 (Currently Amended): The apparatus of claim 10 further comprising the set of processors to maintain <u>athe</u> second private value, the second private value being a boundary to access the shared value.

## Claim 13 (Currently Amended): A system comprising:

- a translating unit to translate a code, the code having an instance of a parallel construct, the instance associated with a task, the translating unit to generate a code segment, the code segment when executed to cause each of a set of plurality of threads to perform the following:
  - by another one of the set of threadsthread by a first thread, which when executed to compare a first private value of the first thread and a second private value of the first thread,
  - if the task has not been undertaken by another one of the set of threadsthread, to undertake the task and to indicate with a shared value the undertaking of the task, and

to indicate with a the first private value the instance;

- a linker unit coupled to the translating unit, the linker unit to link the translated code with a library; and
- a set of processors coupled to the translating unit and the linker unit, the set of processors to host the set of plurality of threads.

Claim 14 (Currently Amended): The system of claim 13 wherein to determine if the task associated with the instance has been undertaken by the another one of the set of threads thread comprises to compare a comparison of the first private value with the shared value.

Claim 15 (Currently Amended): The system of claim 13 wherein the code segment to cause each of the set of threads to perform operations further comprising to maintain a the second private value, the second private value being a boundary for the second private value's corresponding one of the set of threads to access the shared value.

Claim 16 (Currently Amended): <u>A machine-accessible medium containing instructions</u> that, when executed, cause a machine to

A machine readable medium that provides instructions, which when executed by a set of one or more processors, cause said set of processors to perform operations comprising:

receiveing a first code segment, the first code segment having a set of instances of a parallel construct, each of the set of instances of the parallel constructinstances comprised of a task; and

translating transforming the first code segment to a second code segment, the second code segment, when being executed to perform operations comprising:

to allocating initialize a shared value for each of a team of threads, the shared value to indicate a most current one of the set of instances instance encountered by one of a the team of threads, allocating to initialize a first private value and a second private value for each of the team of threads thread, the first private value to indicate one of the set of instances encountered by the first private value's corresponding thread of the team of threads, to determine if the task of the one instance has been undertaken by another thread by a first thread comparing a first private value of the first thread and a second private value of the first thread, upon determining the task has not been undertaken by the other thread, undertaking the task and indicating with the shared value the undertaking of the task,

maintaining to update the shared value with the team of threads, and

maintaining to update the private value of each of the team of threads with the private value's corresponding thread-of the team of threads.

Application No. 09/964,950 Page 5

Claim 17 (Canceled)

Claim 18 (Currently Amended): The machine-readable accessible medium of claim 16 wherein maintaining update the shared value comprises incrementing the shared value when one of the team-of-threads undertakes the task of one of the set of instances instance.

Claim 19 (Currently Amended): The machine-readable accessible medium of claim 16 wherein maintaining update the private value comprises incrementing the private value when the private value's corresponding thread of the team of threads encounters one of the set of instancesinstance.

Claim 20 (Currently Amended): The machine readable accessible medium of claim 16 further comprising instructions that, when executed, cause a machine to:

the thread maintaining update a the second private value for each of the team of threads, the second private value being a boundary for accessing the shared value.

Claim 21 (Currently Amended): A machine-readable-accessible medium containing instructions that, when executed, cause a machine tothat provides instructions, which when executed by a set of one or more processors, cause said set of processors to perform operations comprising:

- receiving receive a first code segment, the first code segment having a set of instances of a parallel construct, each of the set of instances being associated with a task; and
- for each of the set of instances instance, generating to generate a second code segment, which when executed, cause a first thread to perform operations comprising:

encountering one of the set of instancesinstance,

determining determine if the task of the one of the set of instances instance has been undertaken by a second thread by the first thread comparing a first private value of the first thread and a second private value of the first thread,

upon determining the task has not been undertaken by the second thread, undertaking the task and indicating withusing a shared value to indicate the undertaking of the task,

indicating with using a the first private value of the first thread to indicate the one of the set of instances instance, and maintaining a the second private value of the first thread, the second private value being a boundary for accessing the shared value.

Claim 22 (Currently Amended): The machine-readable-accessible medium of claim 21 wherein determining if the task of the one of the set of instances instance has been undertaken by the second thread comprises the first thread comparing the shared value and its first private value.

Claim 23 (Canceled)

Claim 24 (Currently Amended): The machine-readable-accessible medium of claim 21 further comprising the second thread maintaining a third private value and a fourth private value, the third private value to indicating indicate a second one of the set of instances encountered by the second thread and the fourth private value to indicatinge the second thread's boundary for accessing the shared value.